

## **EXPRESS MAIL NO. EM144277387US**

PATENT 70086.00022 (905900-286)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Borshukov et al.

Serial No.: 10/715,777

Filed: November 17, 2003

Title: METHOD FOR DIGITALLY

RENDERING SKIN OR LIKE

**MATERIALS** 

Art Unit: 2624

Examiner: Liew, Alex Kok Soon

## DECLARATION OF JOSEPH J. MELLEMA

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

- 1. Exhibit A attached hereto is a true and correct copy of <u>GPU Gems: Programming Techniques</u>, <u>Tips and Tricks for Real-Time Graphics</u>, Addison-Wesley, Fernando, R., ed., NVIDIA Corporation, 2004.
- Exhibit B attached hereto is a true and correct copy of d'Eon, Eugene et al., <u>Efficient Rendering of Human Skin</u>, Rendering Techniques, 2007, Abstract and First Page, recently obtained from http://diglib.eg.org/EG/DL/WS/EGWR/EGSR07.
- 3. Exhibit C attached hereto is a true and correct copy of Isidoro, John et al., <u>Next Generation Skin Rendering</u>, ATI Research, 2004, recently obtained from http://www.game-tech.com/Talks/SkinRendering.pdf.
- 4. Exhibit D attached hereto is a true and correct copy of Gosselin, David, <u>Real Time Skin Rendering</u>, Game Developer's Conference, 3D Application Research

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- Group, ATI Research, Inc., recently obtained from http://ati.amd.com/developer/gdc/D3D Tutorial\_Skin\_Rendering.pdf.
- 5. Exhibit E attached hereto is a true and correct copy of Sander, Pedro V., Real-Time Skin Rendering on Graphics Hardware, ATI Research, 2004, First Page, obtained from http://ati.de/developer/siggraph04/Sander SkinSketch.pdf.
- 6. Exhibit F attached hereto is a true and correct copy of Weyrich, Tim et al., Analysis of Human Faces using a Measurement-Based Skin Reflectance Model, Association for Computing Machinery, Inc., 2006, recently obtained from http://graphics.ucsd.edu/~henrik/papers/skin-analysis/.
- 7. Exhibit G attached hereto is a true and correct copy of Ambrus, A., Real-Time Approximations of the Rendering Equation, School of Electronics and Computer Science, University of Southampton, recently obtained from http://www.tonyambrus.net/ pub/irp.pdf.
- 8. Exhibit H attached hereto is a true and correct copy of Brandorff, Clemens, Rendering Human Skin, The Institute for Computer Graphics and Algorithms, Computer Graphics Group, 2006, recently obtained from http://www.cg.tuwien.ac.at/research/publications/2006/Brandorff\_06\_SKIN/Brand orff\_06\_SKIN-.pdf
- Exhibit I attached hereto is a true and correct copy of <u>Skin Rendering Overview</u>,
  3D Game Rendering Project, Computer Graphics and Geometry Modeling Lab,
  April 20, 2006, recently obtained from http://cggmwww.csie.nctu.edu.tw/seminar/
  III 06/ 2006 04 20.ppt.
- 10. Exhibit J attached hereto is a true and correct copy of Real-Time Universal Capture Facial Animation With GPU Skin Rendering, a graduate project paper by

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Meng Yang, recently obtained from http://www.seas.upenn.edu/~cis665/projects/final\_report-meng.pdf

- 11. Exhibit K attached hereto is a true and correct copy of <u>Subsurface Scattering</u>, recently obtained from http://en.wikipedia.org/wiki/Subsurface\_scattering.
- 12. I hereby declare under penalty of perjury under the laws of the United States of America that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Joseph J. Mellema

Date